Pharmacology Biochemistry and Behavior, Vol. 65, No. 4, pp. 753–760, 2000
© 2000 Elsevier Science Inc.
Printed in the USA. All rights reserved
0091-3057/00/$–see front matter

CONTENTS
VOLUME 65, 2000

Articles

Behavioral and biochemical studies of dichloromethane fraction from the *Areca catechu* nut.
DAR, A. and S. KHATOON 1

Gabaergic–benzodiazepine system is involved in the crotoxin-induced anxiogenic effect.
MOREIRA, E. G., N. NASCIMENTO, J. R. ROGERO and V. S. VASSILIEFF 7

Lesion of the median raphe nucleus: A combined behavioral and microdialysis study in rats.
THOMAS, H., H. FINK, R. SOHR and M. VOITS 15

Hypothermia inhibits pentylenetetrazol kindling and prevents kindling-induced deficit in shuttle-box avoidance.
RAUCA, C., W. POHLE, K. GRUNENBERG and S. FRANZE 23

The D_3 antagonist PNU-99194A potentiates the discriminative cue produced by the D_3 agonist 7-OH-DPAT.
DEPOORTERE, R., GH. PERRAULT and D. J. SANGER 31

Hypoexpression of benzodiazepine receptors in the amygdala of neophobic BALB/c mice compared to C57BL/6 mice.
HODE, Y., C. RATOMPONIRINA, S. GOBAILLE, M. MAITRE, C. KOPP and R. MISSLIN 35

Prenatal morphine exposure alters *N*-methyl-D-aspartate- and kainate-induced seizures in adult male rats.
ŠLAMBEROVÁ, R., L. VELÍŠEK and I. VATHY 39

Modulation of the discriminative stimulus effects of *d*-amphetamine by mu and kappa opioids in squirrel monkeys.
POWELL, K. R. and S. G. HOLTZMAN 43

Kappa opioid-induced diuresis in female vs. male rats.
CRAFT, R. M., C. M. ULIBARRI and D. J. RAUB 53

Antinociceptive activity of derivatives of improgran and burimamide.
HOUGH, L. B., J. W. NALWALK, R. LEURS, W. M. P. B. MENGE and H. TIMMERMAN 61

Glutamatergic control of food intake in pigeons: Effects of central injections of glutamate, NMDA, and AMPA receptor agonists and antagonists.
ZENI, L. A. Z. R., H. B. K. SEIDLER, N. A. S. DE CARVALHO, C. G. FREITAS, J. MARINO-NETO and MARTA A. PASCHOALINI 67

The paradox of 5-methoxy-*N*,*N*-dimethyltryptamine: An indoleamine hallucinogen that induces stimulus control via 5-HT_{1A} receptors.
WINTER, J. C., R. A. FILIPINK, D. TIMINERI, S. E. HELSLEY and R. A. RABIN 75

Conditioned suppression with cocaine as the unconditioned stimulus.
SCHINDLER, C. W., E. B. THORNDIKE, J. D. MA and S. R. GOLDBERG 83

Gender differences in the reinforcing properties of morphine.
CICERO, T. J., T. ENNIS, J. OGDEN and E. R. MEYER 91

Intake of a palatable sucrose solution modifies the actions of spiradoline, a kappa opioid receptor agonist, on analgesia and feeding behavior in male and female rats.
KANAREK, R. B., B. A. HOMOLESKI and C. WIATR 97

Chlordiazepoxide-induced spatial learning deficits: Dose-dependent differences following prenatal malnutrition.
TONKISS, J., P. L. SHULTZ, J. S. SHUMSKY, T. A. FIACCO, M. VINCITORE, D. L. ROSENE and J. R. GALLER 105

Effect of lidocaine on harmaline-induced tremors in the rat.
BIARY, N., M. ARSHADUDDIN, S. AL DEEB, K. AL MOUTAERY and M. TARIQ 117

Behavioral and hormonal effects of centrally injected "anxiogenic" neuropeptides in growing pigs.
PARROTT, R. F., S. V. VELLUCCI and J. A. GOODE 123

The allocentric place discrimination task is selectively and highly dependent on the central muscarinic system in rats.
KIKUSUI, T., T. TONOHIRO and T. KANEKO 131

Strain differences in neuropathic hyperalgesia.
LOVELL, J. A., S. L. STUESSE, W. L. R. CRUCE and T. CRISP 141

Delta-opioid and 5-HT_3 receptor antagonist effects on ethanol reward and discrimination in C57BL/6 mice.
MIDDAUGH, L. D., B. M. KELLEY, C. H. GROSECLOSE and E. R. CUISON, JR. 145

Caffeine during sleep deprivation: Sleep tendency and dynamics of recovery sleep in rats.
WURTS, S. W. and D. M. EDGAR 155

Role of the laterodorsal tegmental nucleus in scopolamine- and amphetamine-induced locomotion and stereotypy.
LAVIOLETTE, S. R., R. P. M. PRIEBE and J. S. YEOMANS 163

Scopolamine augments the efficacy of physostigmine against soman poisoning in guinea pigs.
PHILIPPENS, I. H. C. H. M., B. P. C. MELCHERS, B. OLIVIER and P. L. B. BRUIJNZEEL 175

Feeding and 8-OH-DPAT-related release of serotonin in the rat lateral hypothalamus.
VOIGT, J.-P., F. KIENZLE, R. SOHR, A. REX and H. FINK 183

A nicotine conjugate vaccine reduces nicotine distribution to brain and attenuates its behavioral and cardiovascular effects in rats.
PENTEL, P. R., D. H. MALIN, S. ENNIFAR, Y. HIEDA, D. E. KEYLER, J. R. LAKE, J. R. MILSTEIN, L. E. BASHAM, R. T. COY, J. W. D. MOON, R. NASO and A. FATTOM 191

CONTENTS VOLUME 65 NUMBER 2 2000

Articles

Anxiolytic-like effects of 7-nitroindazole in the rat plus-maze test.
YILDIZ, F., G. ULAK, B. F. ERDEN and N. GACAR 199

Turning in rats following intraaccumbens shell injections of amphetamine or eticlopride.
BERNSTEIN, S. N. and R. J. BENINGER 203

Acute and chronic effects of gepirone and fluoxetine in rats tested in the elevated plus-maze: An ethological analysis.
SILVA, R. C. B. and M. L. BRANDÃO 209

Role of brain dynorphin in nitrous oxide antinociception in mice.
BRANDA, E. M., J. T. RAMZA, F. J. CAHILL, L. F. TSENG and R. M. QUOCK 217

The role of the benzodiazepine–GABA system in the memory processes of the day-old chick.
FARKAS, L. and S. F. CROWE 223

Serotonergic deficits and impaired passive-avoidance learning in rats by MDEA: A comparison with MDMA.
BARRIONUEVO, M., N. AGUIRRE, J. DEL RÍO and B. LASHERAS 233

Repeated treatments with 7-OH-DPAT: Context-independent behavioral sensitization and conditioned hyperactivity.
MATTINGLY, B. A., L. L. RICE, M. LANGFELS and S. E. FIELDS 241

Effects of acute nicotine on several operant behaviors in rats.
POPKE, E. J., A. J. MAYORGA, C. M. FOGLE and M. G. PAULE 247

Effects of labetalol treatment on the physiological and subjective response to smoked cocaine.
SOFUOGLU, M., S. BROWN, D. A. BABB, P. R. PENTEL and D. K. HATSUKAMI 255

Changes in analgesia-producing mechanism of repeated cold stress loading in mice.
OMIYA, Y., K. GOTO, A. ISHIGE and Y. KOMATSU 261

Pontine tegmentum lesions increase anxiety-like behavior in rats: A comparison with anxiety produced by β-CCE.
PODHORNA, J. and K. B. J. FRANKLIN 267

Effects of adrenoceptor agents on apomorphine-induced licking behavior in rats.
ZARRINDAST, M.-R., S. FAZLI-TABAEI, S. SEMNANIAN, Y. FATHOLLAHI and S. H. YAHYAVI 275

Ethanol, but not the anxiolytic drugs buspirone and diazepam, produces a conditioned place preference in rats exposed to conditioned fear stress.
MATSUZAWA, S., T. SUZUKI and M. MISAWA 281

Characterization of cocaine self-administration and pharmacokinetics as a function of time of day in the rat.
BAIRD, T. J. and D. V. GAUVIN 289

Fear-potentiated startle response in mice: Genetic analysis of the C57BL/6J and DBA/2J intercross.
MCCAUGHRAN, J. A., JR., J. BELL III and R. J. HITZEMANN 301

6-Chloro-3′-nitroflavone is a potent ligand for the benzodiazepine binding site of the $GABA_A$ receptor devoid of intrinsic activity.
VIOLA, H., C. WOLFMAN, M. MARDER, J. D. GOUTMAN, M. BIANCHIN, C. WASOWSKI, D. J. CALVO, I. IZQUIERDO, A. C. PALADINI and J. H. MEDINA 313

Facilitative effects of EGb 761 on olfactory recognition in young and aged rats.
WIRTH, S., J. STEMMELIN, B. WILL, Y. CHRISTEN and G. DI SCALA 321

Rewarding properties of testosterone in intact male mice: A pilot study.
ARNEDO, M. T., A. SALVADOR, S. MARTINEZ-SANCHIS and E. GONZALEZ-BONO 327

Mechanisms of chloroquine-induced body-scratching behavior in rats: Evidence of involvement of endogenous opioid peptides.
ONIGBOGI, O., A. A. AJAYI and O. E. UKPONMWAN 333

Anxiolytic-like effects of antidepressants after acute administration in a four-plate test in mice.
HASCOËT, M., M. BOURIN, M. C. COLOMBEL, A. J. FIOCCO and G. B. BAKER 339

Taurine blocks the glutamate increase in the nucleus accumbens microdialysate of ethanol-dependent rats.
DAHCHOUR, A. and P. DE WITTE 345

Behavioral effects of $GABA_A$ receptor stimulation and GABA-transporter inhibition.
SCHMITT, U., H. LÜDDENS and C. HIEMKE 351

CONTENTS VOLUME 65 NUMBER 3 2000

Articles

Differences in the consumption of ethanol and flavored solutions in three strains of rats.
GOODWIN, F. L. W., N. BERGERON and Z. AMIT 357

Modulation of memory processing in the cingulate cortex of mice.
FARR, S. A., K. UEZU, T. A. CREONTE, J. F. FLOOD and J. E. MORLEY 363

Supraadditive effect of *d*-fenfluramine plus phentermine on extracellular acetylcholine in the nucleus accumbens: Possible mechanism for inhibition of excessive feeding and drug abuse.
RADA, P. V. and B. G. HOEBEL 369

Acetylcholine release in ventral tegmental area by hypothalamic self-stimulation, eating, and drinking.
RADA, P. V., G. P. MARK, J. J. YEOMANS and B. G. HOEBEL 375

Changes in food intake and food selection in rats after 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD) exposure.
TUOMISTO, J. T., M. VILUKSELA, R. POHJANVIRTA and J. TUOMISTO 381

Test conditions influence the response to a drug challenge in rodents.
HARKIN, A., J. P. KELLY, J. FRAWLEY, J. M. O'DONNELL, and B. E. LEONARD 389

Reinforcing and neurochemical effects of cocaine: Differences among C57, DBA, and 129 mice.
KUZMIN, A., and B. JOHANSSON 399

Time-dependent alterations in ICSS thresholds associated with repeated amphetamine administrations.
LIN, D., G. F. KOOB and A. MARKOU 407

Differences in drug-induced place conditioning between BALB/c and C57Bl/6 mice.
BELZUNG, C. and S. BARREAU 419

The protective effects of PBN against MPTP toxicity are independent of hydroxyl radical trapping.
FERGER, B., P. TEISMANN, C. D. EARL, K. KUSCHINSKY and W. H. OERTEL 425

Similar effects of D_1/D_2 receptor blockade on feeding and locomotor behavior.
PITTS, S. M. and J. C. HORVITZ 433

Sustained behavioral stimulation following selective activation of group I metabotropic glutamate receptors in rat striatum.
WANG, J. Q. and L. MAO 439

Ontogeny of phencyclidine and apomorphine-induced startle gating deficits in rats.
MARTINEZ, Z. A., N. D. HALIM, J. L. OOSTWEGEL, M. A. GEYER and N. R. SWERDLOW 449

PD-135,158, a cholecystokinin$_B$ antagonist, enhances latent inhibition in the rat.
GRACEY, D. J., R. BELL and D. J. KING 459

Anxiolytic-like effects of meprobamate: Interactions with an opiate antagonist in Swiss and BALB/c mice.
BELZUNG, C., A. M. LE GUISQUET and A. ÅGMO 465

Benzodiazepine receptor affinities, behavioral, and anticonvulsant activity of 2-aryl-2,5-dihydropyridazino[4,3-b]indol-3(3H)-ones in mice.
DE SARRO, G., A. CAROTTI, F. CAMPAGNA, R. MCKERNAN, M. RIZZO, U. FALCONI, F. PALLUOTTO, P. GIUSTI, C. RETTORE and A. DE SARRO 475

Heroin-specific stimuli reinstate operant heroin-seeking behavior in rats after prolonged extinction.
GRACY, K. N., L. A. DANKIEWICZ, F. WEISS and G. F. KOOB 489

Circadian rhythm-dependent development of melatonin effects and tolerance to PHNO in rats.
MUNRO, J. D. and M. T. MARTIN-IVERSON 495

Effects of ropinirole on various Parkinsonian models in mice, rats, and cynomolgus monkeys.
FUKUZAKI, K., T. KAMENOSONO and R. NAGATA 503

Individual differences in Pavlovian autoshaping of lever pressing in rats predict stress-induced corticosterone release and mesolimbic levels of monoamines.
TOMIE, A., A. S. AGUADO, L. A. POHORECKY and D. BENJAMIN 509

Learning and memory in mice treated with choline oxidase, a hydrolytic enzyme for choline.
IKARASHI, Y., H. KURIBARA, T. SHIOBARA, A. TAKAHASHI, H. ISHIMARU and Y. MARUYAMA 519

Quantification of *S*-adenosylmethionine-induced tremors: A possible tremor model for Parkinson's disease.
LAMANGO, N. S., R. A. NESBY and C. G. CHARLTON 523

Lack of evidence for a role of serotonin in interleukin-1–induced hypophagia.
SWIERGIEL, A. H. and A. J. DUNN 531

Diazepam has no beneficial effects on stress-induced behavioural and endocrine changes in male tree shrews.
VAN KAMPEN, M., U. SCHMITT, C. HIEMKE and E. FUCHS 539

Behavioral and neurochemical alterations after lithium–pilocarpine administration in young and adult rats: A comparative study.
DE BRUIN, V. M. S., M. M. F. MARINHO, F. C. F. DE SOUSA and G. S. B. VIANA 547

Long-term functional end points following middle cerebral artery occlusion in the rat.
HUDZIK, T. J., A. BORRELLI, P. BIALOBOK, D. WIDZOWSKI, S. SYDSERFF, A. HOWELL, P. GENDRON, D. CORBETT, J. MILLER and G. C. PALMER 553

Fentanyl self-administration in juvenile rats that were tolerant and dependent to fentanyl as infants.
THORNTON, S. R., A. B. LOHMANN, R. A. NICHOLSON and F. L. SMITH 563

CONTENTS VOLUME 65 NUMBER 4 2000

Articles

Behavioral effects of acute and chronic imipramine in the elevated T-maze model of anxiety.
TEIXEIRA, R. C., H. ZANGROSSI, JR. and F. G. GRAEFF 571

Ricinine-elicited seizures: A novel chemical model of convulsive seizures.
FERRAZ, A. C., L. F. PEREIRA, R. L. RIBEIRO, C. WOLFMAN, J. H. MEDINA, F. A. SCORZA, N. F. SANTOS, E. A. CAVALHEIRO and C. DA CUNHA 577

The effect of amphetamine on locomotion depends on the motor device utilized: The open field vs. the running wheel.
DELLA MAGGIORE, V. and M. R. RALPH 585

Effect of subchronic antidepressant treatments on behavioral, neurochemical, and endocrine changes in the forced-swim test.
CONNOR, T. J., P. KELLIHER, Y. SHEN, A. HARKIN, J. P. KELLY and B. E. LEONARD 591

Effect of tricyclic antidepressants on taste responses in humans and gerbils.
SCHIFFMAN, S. S., J. ZERVAKIS, M. S. SUGGS, K. C. BUDD and L. IUGA 599

Decrement in operant performance produced by NMDA receptor antagonists in the rat: Tolerance and crosstolerance.
DRAVOLINA, O. A., E. E. ZVARTAU and A. Y. BESPALOV 611

Intrathecal *N*-methyl-D-aspartate (NMDA) induces paradoxical analgesia in the tail-flick test in rats.
ÁLVAREZ-VEGA, M., A. BAAMONDE, M. GUTIÉRREZ, A. HIDALGO and L. MENÉNDEZ 621

Evidence that total extract of *Hypericum perforatum* affects exploratory behavior and exerts anxiolytic effects in rats.
VANDENBOGAERDE, A., P. ZANOLI, G. PUIA, C. TRUZZI, A. KAMUHABWA, P. DE WITTE, W. MERLEVEDE and M. BARALDI 627

Pharmacology of flavor preference conditioning in sham-feeding rats: Effects of dopamine receptor antagonists.
YU, W.-Z., R. M. SILVA, A. SCLAFANI, A. R. DELAMATER and R. J. BODNAR 635

The anxiolytic-like properties of two selective MAOIs, moclobemide and selegiline, in a standard and an enhanced light/dark aversion test.
DE ANGELIS, L. and C. FURLAN 649

(+)amphetamine-stimulus generalization to an herbal ephedrine product.
GLENNON, R. A. and R. YOUNG 655

Decreased accumbens dopamine release after cocaine challenge in behaviorally sensitized female rats.
JOHNSON, D. W., P. EODICE, H. WINTERBOTTOM and D. J. MOKLER 659

Nicotine enhances stimulus detection performance of middle- and old-aged rats: A longitudinal study.
GRILLY, D. M., B. B. SIMON and E. D. LEVIN 665

Effects of SCH-23390 and raclopride on cocaine discrimination in male and female Wistar rats.
ANDERSON, K. G. and F. VAN HAAREN 671

The role of serotonin$_2$ receptors in mediating cocaine-induced convulsions.
O'DELL, L. E., M. J. KREIFELDT, F. R. GEORGE and M. C. RITZ 677

Effects of H1 antagonists on cholinomimetic-induced tremulous jaw movements: Studies of diphenhydramine, doxepin, and mepyramine.
CARLSON, B. B., J. T. TREVITT and J. D. SALAMONE 683

Acoustic startle and fear-potentiated startle in alcohol-preferring (P) and -nonpreferring (NP) lines of rats.
MCKINZIE, D. L., T. J. SAJDYK, W. J. MCBRIDE, J. M. MURPHY, L. LUMENG, T.-K. LI and A. SHEKHAR 691

Pharmacology of sucrose-reinforced place-preference conditioning: Effects of naltrexone.
DELAMATER, A. R., A. SCLAFANI and R. J. BODNAR 697

The role of benzodiazepine receptors in the acquisition and expression of behavioral sensitization to methamphetamine.
ITO, K., T. OHMORI, T. ABEKAWA and T. KOYAMA 705

Neonatal nicotine exposure alters hippocampal EEG and event-related potentials (ERPs) in rats.
SLAWECKI, C. J., J. D. THOMAS, E. P. RILEY and C. L. EHLERS 711

Effects of chronic celiprolol treatment on brown fat, feeding, and drinking in *fa/fa* Zucker rats.
SAVONTAUS, E., J. ROURU, K. MALMINIEMI, V. LUUKKAA, U. PESONEN, M. KOULU and R. HUUPPONEN 719

The NMDA antagonist EAA 494 does not impair working memory in an operant DNMTP task in rats.
BALLARD, T. M. and K. H. MCALLISTER 725

Gonadectomy enhances shock-induced behavioral inhibition in adult male rats: Implications for impulsive behavior.
SVENSSON, A. L., B. SÖDERPALM and J. A. ENGEL 731

Differential effects of beta-carbolines and antidepressants on rat exploratory activity in the elevated zero-maze.
PÄHKLA, R., A. KASK and L. RÄGO 737

Kindling induced by pentylenetetrazole in rats is not directly associated with changes in the expression of NMDA or benzodiazepine receptors.
ATACK, J. R., S. M. COOK, P. H. HUTSON and S. E. FILE 743

Index to volume 65 751